Remarks

Claims 1 to 5, and 14 – 15 have been canceled. A terminal disclaimer has been filed to avoid the obvious-type double patenting rejection in respect of claims 6 and 8.

The allowability of claim 17 is noted with appreciation.

In a prior art system, ports are monitored by monitoring equipment present at the monitored port. Claim 6 covers the embodiment wherein instead of monitoring the flow of data through a port at that port, the data is replicated onto a remote port where the monitoring takes place, thus obviating the need to have monitoring equipment at each port. The wording of claim 6 has been amended to better reflect this aspect of the invention.

The Examiner alleges that replication of data to a remote monitoring port is inherent in the Adminstration Module (AM) of Figure 22. However, the applicants respectfully submit that there is no basis in Hillier for such an allegation. The ATM-CM serves as the switch with a number of ports (ATMUs) etc, and the ATM-CM is under the control of the AM, but there is no reason why cells at the ports should be replicated to the AM, and indeed such a solution would not be consistent with the function of the AM, which is to serve as a controller for the switch. The Examiner's rejection is respectfully traversed because Hillier clearly fails to show replication of the data from the ports to a centralized resource where the data is monitored as if on site. Indeed the passage at column 43, lines 3 -6 suggests exactly the opposite in that this passage states that "Monitoring circuit is provided to determine that composite cells are being received by the ATMU every 125 μs on average." and the passage at col. 43, line 25 states that "A direct test of circuit continuity is designed into the ATMU "(emphasis added).

Similar arguments apply with respect to claim 9, which relates specifically to the forwarding of OAM packets (cells) to a centralized OAM resource where they are processed so as to obviate the need for packet processing at the ingress ports. As shown in Figures 13 and 14, this arrangement enables the dedicated microprocessor 52 to be eliminated, resulting in substantially simplification of the hardware. Figure 22 shows a Broadband OA & M module without any detailed explanation of its function. Some hint of its function is given in the passage commencing at col. 3, line 56, which states that the ATMUs receive control information from the call control units including the Broadband OAMP. There is no suggestion or teaching that the OAM cells are redirected to the BBOAMP as more fully set forth in claim 9. Similar arguments apply to claim 16, which is the method counterpart of claim 9.

With regard to claim 11, Hiller does not disclose a reassembler and lookup engine as more particularly defined in claim 11 as amended. Moreover, Hiller only discloses ATM, which is a connection-oriented network, and ISDN, which is time division multiplexed. There is no disclosure of an interface to a connectioneless network (such as Ethernet, as more fully defined in claim 11). Indeed, the applicants can find no reference in Hiller to connectionless networks. In the applicant's respectful submission, claim 11 as amended cannot be anticipated.

Finally, with regard to claim 13, as pointed out Hiller does not disclose a connectionless network. In such a network, packets, such as Ethernet frames, are injected into the transport medium with a destination address, and are extracted by the destination device having the matching address (MAC address). Hiller is concerned with ATM and ISDN, neither of which are connectionless networks. The Examiner identifies the Terminal Server in Figure 22 as the centralized router server defined in claim 13. However, there is

no indication that the terminal server stores routing information for devices attached to the network as defined in claim 13. The description of the terminal server is sparse. Col. 25, lines 14 – 16 state that "The Terminal Server supports asynchronous terminals and interface access units for broadband Operations Support Systems (OSSs). There is no indication that the Terminal Server plays a role in providing routing information. Moreover, it is noted that in his reasons for allowance in respect of claim 17, the Examiner noted that the prior art does not show a route server that periodically distributes information to the access devices, which limitation has been incorporated in claim 13.

It is thus believe the application is now in condition for allowance.

Reconsideration and allowance are earnestly solicited.

Respectfully submitted,

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